# ● PRINTER RUSH ● (PTO ASSISTANCE)

Application :	10/663,6	600 Examiner : 1	HOFSASS	GAU:	2636
From:	10 10 10	Location:	HOFSASS IDC)FMF FDC EPM 10/6/03,600	Date:	11/21/05
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**REV 10/04** 

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Message: Re: Appl. No. 10/663,600, Filed 09-06-2003	
Attached is a copy of the Notice to File Corrected Application Papers Appl. 10/663,600. The requested information has been supplied; the Thank you for your help.	page is now corrected.
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/663,600	09/16/2003	Rodney M. Homsby	038190/2 -5096	3271	
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Please find below and/or attached an Office communication concerning this application or proceeding.





#### UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

> Serial Number 10663600

Date Mailed 11/30/05

#### NOTICE TO FILE CORRECTED APPLICATION PAPERS

#### Notice of Allowance Mailed

This application has been accorded an Allowance Date and is being prepared for issuance. The application, however, is incomplete for the reasons below.

Applicant is given 30 days from the mail date of this Notice within which to correct the informalities indicated below. A failure to reply will result in the application being ARANDONED. This period for reply is NOT extendable under 37 CFR 1.136 (a) or (b).

Specification page 20, lines 28 and 31 serial numbers are missing.

APPLICANT MUST SUPPLY MISSING INFORMATION WITHIN 30 DAY! OF THE MAIL DATE OF THIS NOTICE.

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data. The digital data can be extracted from the processing element in any of a number of different known manners by another processing device, such as a personal computer, laptop computer or other high level processor. Thereafter, if desired, the digital data can be further analyzed to determine the location of the damage in the conductors.

In one embodiment, the digital data, as well as the reference digital data, can be presented on a display, such as by plotting each as a separate waveform. In this regard, FIG. 7 illustrates an example of digital data plotted against reference digital data for a conductor having a length of fifty feet terminated at a load. As shown, the reference digital data (left plot) is compared against the digital data (right plot) acquired in accordance with embodiments of the present invention. As shown, the digital data (right plot) differs substantially from the reference digital data (left plot). Thus, the display of FIG. 7 may illustrate a damaged conductor. Further, as shown at the bottom of the display of FIG. 7, the length of the conductor is determined to equal 12.55 feet, which differs substantially from the actual length of the conductor, fifty feet. In contrast, in instances in which the conductor is not damaged, the reference digital data (left plot) is typically substantially similar to the digital data (right plot).

In another embodiment of the present invention, shown in FIG. 8, the system can further include an arc fault detector 70 electrically connected between the programmable controller 10 and the loads 14. In this embodiment, the arc fault detector is capable of monitoring the current flow through the programmable controller for anomalies associated with an arc event. Then, when one or more such anomalies are identified by the arc fault detector, the arc fault detector can notify the programmable controller of the event so that the programmable controller can place respective switches 40 in the off mode to prevent the respective load from being damaged by an arc event. For more information on such an arc fault detector 70, as well as the system including both the damaged wire detector 16 and the arc fault detector, see U.S. Patent Application No. 10/662,565, entitled: System and Method for Remotely Detecting Electric Arc Events in A Power System, filed September 15, 2003; and U.S. Patent Application No. 10/663,584, entitled: System and Method for Remotely Detecting and Locating Faults in A Power System, filed concurrently 30 herewith, the contents of both of which are hereby incorporated by reference in their entirety.